Amendments to the Claims:

Please cancel claim 32 without prejudice or disclaimer, and amend Claims 3-4, 6-9, 11, 13-17, 19-21 and 23-31 as set forth below.

1. (Original) A method for screening of cellular responses of cellular components comprising:

(a) providing cellular components on the surface of a solid porous metallo-oxide substrate, wherein

(i) said solid porous substrate has oriented through-going channels;

(ii) said solid porous substrate retains said cellular components on its surface, and wherein,

(iii) said solid porous substrate has immobilized therein, within the pores, an array of detector molecules;

(b) delivering test compounds to positions on the substrate corresponding to the arrayed detector molecules on the surface of said solid porous substrate;

(c) incubating said test compounds with said cellular components on the surface of the solid porous substrate, under conditions allowing the induction of cellular responses;

(d) assaying said cellular responses; and,

identifying and characterizing the cellular responses induced by said test compounds.

2. (Original) The method according to claim 1, wherein said solid substrate is a flow-through porous solid substrate.

3. (Currently amended) The method according to claim 1, ~~any of claims 1 to 2,~~ wherein said providing of cellular components on the surface of a substrate is by a deposit directly on said substrate of an inoculum or a culture.

4. (Currently amended) The method according to claim 1, ~~any of claims 1 to 3,~~ wherein said delivering of test compounds is by means of contact force.

5. (Original) The method according to claim 4, wherein said contact force is a capillary force or a piezo-electric-force.

6. (Currently amended) The method according to claim 1, ~~any of claims 1 to 5,~~ wherein the nutrient(s) are provided from underneath the pores of the solid surface.

7. (Currently amended) The method according to claim 1, ~~any of claims 1 to 6,~~ wherein said assaying of cellular responses is by:
(a) providing a detection agent to the cellular components;
(b) washing off excess of unincorporated detecting agent; and
(c) detecting the presence or absence of a change in detectable signal, the presence of a change in detectable signal indicating a cellular response.

8. (Currently amended) The method according to claim 1, ~~any of claims 1 to 7,~~ wherein said cellular response is assayed in whole broth or cell culture medium, in isolated cells such as pelleted cells, in supernatant of the cellular components, or in lysate of the cellular components.

9. (Currently amended) The method according to claim 1, ~~any of claims 1 to 8,~~ wherein said delivery of test compounds is by a means chosen from the group comprising a delivery mask, a high precision x-y-z pipettor, inkjet printer, and manual handling.

10. (Original) The method according to claim 9, wherein said delivery of test compounds is by means of a high precision x-y-z pipettor or inkjet printer.

11. (Currently amended) The method according to claim 1, ~~any of claims 1 to 10,~~ wherein said identifying of the cellular responses is by luminescence.

12. (Original) The method according to claim 11, wherein said luminescence is fluorescence.

13. (Currently amended) The method according to claim 1, ~~any of claims 1 to 12,~~ wherein said cellular components are selected from the group consisting of ~~comprising~~ mammalian cells, insect cells, yeast cells, fungal cells, plant cells, ~~and~~ microbial cells, ~~including~~ bacterial cells, ~~including~~ cellular vesicles, cellular organelles, tissue sections, and whole organisms including nematodes.

14. (Currently amended) The method according to claim 1, ~~any of claims 1 to 13,~~ wherein said detector molecules are selected from the group consisting of ~~comprising~~ nucleic acids including modified analogues thereof, peptides, proteins, ~~and~~ antibodies, ~~including~~ antibody fragments, enzyme substrates and specific dyes.

15. (Currently amended) The method according to claim 1, ~~any of claims 1 to 14,~~ wherein said cellular responses are chosen from the group consisting of ~~comprising~~ chemically induced or physiological events in the cell including lysis, apoptosis, growth inhibition, and growth promotion; production, secretion, and surface exposure of a protein or other molecule of interest by the cell; membrane surface molecule activation including receptor activation; transmembrane ion transports; and transcriptional regulations.

16. (Original) The method according to claim 15, wherein said molecule of interest is selected from the group consisting of ~~comprising~~ peptides, ~~including~~ lipopeptides, glycosylated peptides, ~~and~~ antimicrobial peptides, polypeptides, proteins, enzymes, antimicrobial molecules, primary and secondary metabolites, and small organic molecules including pharmaceutical molecules.

17. (Currently amended) The method according to claim 1, ~~any of claims 1 to 16,~~ wherein said test compound is a drug or any compound which is useful in the selection process of a drug candidate.

18. (Original) The method according to claim 17, wherein said test compound is a drug selected from a chemical or natural drug candidate library.

19. (Currently amended) The method according to claim 1, ~~any of claims 1 to 18,~~ wherein said solid substrate is an aluminum-oxide substrate.

20. (Currently amended) The method according to claim 1, ~~any of claims 1 to 19,~~ wherein said assaying is performed in real-time.

21. (Currently amended) The method according to claim 1, ~~any of claims 1 to 20,~~ wherein said assaying is an end-point assaying.

22. (Original) The method according to claim 7, wherein said providing a detection agent to the cellular components occurs prior to delivering of test compound thereby providing pre-labeled cellular components.

23. (Currently amended) The method of claim 1, wherein an induced cellular response of a host cell is monitored. ~~Use of a method according to any of claims 1 to 22, for monitoring induced cellular responses of host cells.~~

24. (Currently amended) The method of claim 1, wherein cellular components are provided using ~~Use of a method according to any of claims 1 to 22, for~~ on-chip recombination, transformation or viral introduction ~~of cellular components~~.

25. (Currently amended) The method of claim 1, comprising ~~Use of a method according to any of claims 1 to 22, for functional screening of cellular responses upon~~ assaying host cells with test compounds.

26. (Currently amended) The method of claim 1, wherein ~~A microarray, comprising a solid porous metallo-oxide substrate with oriented through-going channels and~~ an array of detector molecules is provided within the pores of said substrate, and ~~for performing a method according any of claims 1 to 22,~~ wherein an array of test compounds is provided within predefined regions, wherein said test compounds are in liquid solution and not immobilized in the substrate.

27. (Currently amended) The method of claim 1, wherein ~~A microarray, comprising a solid porous metallo-oxide substrate with oriented through-going channels and~~ an array of detector molecules is provided within the pores of said substrate, and ~~for performing a method according any of claims 1 to 22,~~ wherein an array of cellular components is provided in predefined regions on a substrate, said cellular components being conditioned for preservation on said substrate.

28. (Currently amended) The method of claim 1, wherein ~~A microarray, comprising a solid porous metallo-oxide substrate with oriented through-going channels and~~ an array of detector molecules is provided within the pores of said substrate, and ~~for performing a method according any of claims 1 to 22,~~ wherein a cellular component is provided on a substrate, said cellular component being conditioned for preservation on said substrate.

29. (Currently amended) The method ~~microarray~~ according to any of claims 26 to 28, wherein said array of detector molecules comprises a plurality of equal detector molecules or a plurality of different detector molecules.

30. (Currently amended) The method ~~microarray~~ according to claim 27 or 28, wherein said condition is chosen from the group comprising lyophilization and glycerol dissolution.

31. (Currently amended) The method according to claim 1, wherein the ~~Use of a microarray according to any of claims 26 to 30, for providing~~ cellular components on the surface of the ~~a~~ substrate ~~for use in a method according to any of claims 1 to 22, thereby providing said~~ comprise cellular components with low spreading

properties.

32. (Canceled)